Replacement Abstract:

Please cancel the Abstract found on page 26 and replace it with the following:

Implementations of a two-dimensional pyramid filter are disclosed including a two-dimensional pyramid filter architecture of an order 2N-1, where N is a positive integer greater than three. The two-dimensional pyramid filter architecture may include one-dimensional pyramid filters of order 2N-1 and summer circuits. The two dimensional pyramid filter architecture may, in operation, be capable of producing, on respective clock cycles, at least two pyramid filtered output signals corresponding to the summation by first and second summer circuits of the output signals produced by ten one-dimensional pyramid filters of order 2N-1, and a pyramid filtered output signal corresponding to an output signal produced by summing signal sample matrices of order [2(N-1)-1] in a third summer circuit. The respective pyramid filtered output signals in the two dimensional pyramid filter architecture may be summed by a fourth summer circuit on respective clock cycles of the two dimensional pyramid filter architecture.